

Natural beauties and historic monuments of the Vihorlatské vrchy Mts.

The territory of Slovakia belongs to those interesting regions of Europe, where you can see the beauties of high mountains, piedmont, semi-steppe and steppe. The region is rich in deep-incised valleys, torrents, dense woods, mountain meadows and vast plains. It is either the country of meadows, peat bogs and superb underground spaces. The quaintness of the rocky formations scattered within the entire area impressively characterises the geological history of this striking country and each of its regions.

If somebody invites you for a visit, he surely regards you. He will surely try to do his best, you will preserve the places visited in your memory looking forward to return back. We try to invite you to visit one of the most easterly situated regions of Slovakia, Vihorlatské vrchy Mts. and their vicinity. We hope, that the geological-educational map of the area should familiarise your knowledge and it will serve as a guide to your prowling through this country.

Manifold natural beauties, their seasonal variousness and attractiveness, a lot of cultural-historical monuments, exquisite opportunities for tourism and recreation connected with heartiness and vivid folk traditions, are typical for this region. Here, in the splendid natural environment, you can find campgrounds, restaurants and hotels, cabins, artificial water reservoirs (Zemplínska šírava, the Vinné Lake). Volcanic slopes allow dwellers to grow and produce wines typical for this area (Tibava, Vinné). The Vihorlatské vrchy Mts. are dominant because of their steep, deeply incised furrowed slopes with a wide range of geological phenomena, widespread beech forests, rare vegetation and wildlife associations. The whole region is important from the viewpoint of water management, soil protection, geology, flora and fauna protection, as well as forestry (from the introduction of Fagetum association the former natural appearance has remained the same). From the geologic point of view this area represents our easternmost volcanic mountains, which originated in Tertiary - during Neogene, approximately 17 millions years ago, when the calc-alkali lavas erupted. These lavas covered the older Mesozoic sedimentary rocks (limestones, claystones, conglomerates) as well as older Paleogene and Neogene rocks (sandstones, claystones, conglomerates). The eruptions, as well as the andesite lava effusions formed several larger volcanoes like Morské oko, Diel and Popriečny arranged in a line, and smaller volcanoes Vihorlat, Sokolský potok, Kyjov and Kamienka in a second line. The volcanic activity left behind manifold extensity of volcanic forms. They remained preserved in a distinct volcanic relief, which is rising up from the vast productive Eastern Slovakia Lowland (120 m above sea level) to mountains range of about 1000 m above sea level (Vihorlat, 1075,4 m above sea level). The explosive-effusive activity characterized by fallout volcanic products (so-called pyroclastic products) and lava flows, as well as by intrusions of various magmatic bodies (dykes, necks) took place approximately 17 millions to 9,5 millions years ago. During this activity and due to subsequent movements along faults and strong erosion activity, a whole range of topographic depressions, elevations and slope failures has been formed. We can observe them on the north rim of the Vihorlatské vrchy Mts., as well as within the Central Zone of the Morské oko Stratovolcano. The matchless phenomenon - natural lake Morské oko - was created by landslide. Due to weathering of grandiose lava flows (elevations Sninský kameň, Motrogoň, Fedkov, etc.) layered on the slopes of each volcano, conspicuous forms has been formed, like rock walls, cliffs, slope debris, stony fields and a lot of others. Within the depressions small lakes originated (Malé Morské oko, Kotlík) and peat bog associations preserved below the Motrogoň elevation (Hypkania, Postavka and Ďurova mláka). The Vihorlatské vrchy Mts. are very

important because of nature protection. Their most valued parts are declared large- and small-area protected areas. They comprise Protected Landscape Area, protected areals, national nature reserves, nature reserves and nature monuments. The positive care of them, supported by inventory research, secures the protection of rare and endangered species of flora and fauna, as well as associations providing biotopes to them. The settlement is known from prehistoric times in this area. Volcanic mountains with its natural sources lured man to settle here also in further ages. The up to date research has evidenced settlements of Scythian, Thracian, Celtic, Dacian and, finally, Slav people. The numerous archaeological findings confirm the continuation of this past and traditions in folk culture up to present